

What is claimed is:

1. A vaccine for treatment of candidiasis comprising a pharmaceutically effective amount of a peptide mimotope specific to the mannan portion of the phosphomannan complex of *Candida* which elicits an immune response.

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2. A vaccine of claim 1, wherein said treatment is defined as prevention of initiation of disease or as therapy after disease onset.

3. The vaccine of claim 1 wherein said candidiasis is selected from the group consisting of hematogenous disseminated candidiasis and mucocutaneous candidiasis.

4. The vaccine of claim 1, wherein said peptide is YRQFVTGFW; where: Y, tyrosine; R, arginine; Q, glutamine; F, phenylalanine; V, valine; T, threonine; G, glycine; W, tryptophan.

5. The vaccine of claim 1, wherein a consensus sequence of amino acids for said peptide with reactivity to MAb B6.1 is selected from the group consisting of ArXXAr(Z)ZZArAr; where: Ar, aromatic amino acid (F, W or Y); X, any amino acid; Z, is S (S, serine), T or G; (Z), is S, T, or G amino acid which may or may not be present.

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6. The vaccine of claim 1, wherein said effective amount is about 0.1 $\mu$ g to about 500 mg per human dose.

7. The vaccine of claim 1, further comprising a pharmaceutically acceptable carrier.

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8. The vaccine of claim 1, further comprising a pharmaceutically acceptable delivery vehicle.

9. The vaccine of claim 1, wherein said *Candida* is selected from the group consisting of *Candida albicans*, *Candida tropicalis*, *candida* serotype A and *candida* serotype B.

10. The vaccine of claim 6, wherein said peptide portion is conjugated to said carrier.

11. A vaccine for treatment of disseminated candidiasis comprising a pharmaceutical effective amount of an epitope mimic of *Candida albicans* comprising a peptide mimotope specific for  $\beta$  1,2-trimannose or acid stable epitopes thereof, that elicit an immune response.

12. A therapeutic composition for treatment of disseminated candidiasis comprising a pharmaceutical effective amount of passive humoral antibodies to *Candida albicans* directed against a peptide mimotope specific for the  $\beta$  1,2-trimannose or an epitope in the acid stable region of the mannan portion of the phospho-mannan complex of *Candida albicans* that elicits an immune response.

13. Isolated protective antibodies for passive protection against hematogenous disseminated candidiasis and mucocutaneous candidiasis.

14. Monoclonal antibodies specific for a peptide mimotope of mannan epitopes in the acid stable portion of the mannan epitope and  $\beta$ -1,2-linked tri, tetra- and

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penta-mannosyl residues in the acid labile part of the mannan portion of the phosphomannoprotein complex.

15. A method for the treatment of disseminated candidiasis and mucocutaneous candidiasis comprising administering an effective amount of the monoclonal antibodies of claim 13 to provide protection.

16. A method for immunization against candidiasis comprising administering the composition of claim 1 to a patient in need of said treatment.

17. A monoclonal antibody specific for peptide mimotopes of *C. albicans* phosphomannoprotein.

18. A method for immunization against candidiasis comprising administering monoclonal antibodies raised to the composition of claim 1 to a patient in need of said treatment.

19. A method for immunization against candidiasis comprising generating *Candida albicans* peptides specific for phosphomannan complex neutralizing antibodies.

20. A monoclonal antibody as in claim 18, wherein said monoclonal antibody has all the identifying characteristics of B6.1, ATCC Accession No. HB11925.

21. The method of claim 16, wherein said vaccine is administered to a non-infected individual or an infected individual.

22. A peptide specific to the mannan portion of the phosphomannan complex of *Candida* wherein said

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peptide has the amino acid sequence YRQFVTGFW; where:  
Y, tyrosine; R, arginine; Q, glutamine; F,  
5 phenylalanine; V, valine; T, threonine; G, glycine; W,  
tryptophan, or function equivalents of said peptide.

23. The peptide of claim 22, wherein a consensus  
sequence of amino acids for said peptide with  
reactivity of MAb B6.1 is selected from the group  
consisting of ArXXAr(Z) ZZArAr; where: Ar, aromatic  
5 amino acid (F, W or Y); X, any amino acid; Z, is S  
(where S, serine), T or G; (Z), is S, T or G which may  
or may not be present.

24. A polynucleotide vaccine for the treatment of  
candidiasis comprises of a pharmaceutically effective  
amount of DNA or RNA to encode the amino acid sequence  
of the peptide mimotopes of claim 1.

25. The vaccine of claim 24, wherein said  
polynucleotide sequences encode the peptide YRQFVTGFW;  
where Y, tyrosine; R, arginine, Q, glutamine; F,  
phenylalanine; V, valine; T, threonine; G, glycine; W,  
5 tryptophan.

26. The vaccine of claim 24, wherein the  
polynucleotide sequences code for a consensus amino  
acid sequence for peptides with reactivity to MAb B6.1,  
selected from the group consisting of; ArXXAr(Z)ZZArAr;  
5 where: Ar, aromatic amino acid (F, W or Y); X, any  
amino acid; Z, equals S (where S, serine), T or G; (Z),  
is S, T, or G which may or may not be present.

27. The vaccine of claim 24, wherein the  
polynucleotides encode peptide mimotopes of epitopes in

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the acid stable or acid labile portions of *Candida* phosphomannan complex.

28. The vaccine of claim 24, wherein the polynucleotides encode peptides that bind to protective antibodies directed against epitopes in the acid stable or acid labile portions of *Candida* phosphomannan.

29. The vaccine of claim 24, wherein said polynucleotide coding region is delivered in an appropriate vaccine vector for expression of the peptide mimotopes at pharmaceutically effective amounts for the treatment of candidiasis.

30. The vaccine of claim 24, further comprising a pharmaceutically acceptable carrier and delivery vehicle.

31. A method for immunization against candidiasis comprising administering polynucleotides encoding peptide mimotopes of claim 1 to a patient in need of said treatment.

32. A novel method for vaccination against non-protein epitopes of *Candida*, wherein said vaccine is comprised of polynucleotides encoding peptide mimotopes of the non-protein epitopes.

33. A novel method with broad application for vaccination against non-protein epitopes (e.g., carbohydrate, lipid), wherein said vaccine is comprised of polynucleotides encoding peptide mimotopes of non-protein epitopes.

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